

### **Abstract**

This application proposes a solution for providing fast auto-recovery of the control plane network against a control link failure in an optical communications network. The described solution applies to both protected and unprotected control channels. If a control channel is protected, the solution is triggered only when the protection control channel cannot resume the connectivity. In a control link failure situation each node in a neighboring pair attempts to find an alternate control route before informing the network manager of the link failure. If an alternate route is established, the control plane is quickly re-established without involving system resources.

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